

What is claimed is:

1. A back support device for heating and vibrating a user's back comprising:
  - a) a belt having an inner covering and an outer covering;
  - 5 b) a conformable pad of heat retention material, said pad having an inner side adjacent said belt inner covering, an outer side, and an outer pad periphery;
  - c) a heating element having an inner side adjacent the outer side of said heat retention pad, an outer side, a heating element periphery smaller than said pad periphery;
  - 10 d) a back support plate adjacent the outer side of said heating element;
  - e) a plurality of vibrators between said inner and outer coverings, said vibrators being positioned beyond said heating element periphery, but within said pad periphery;
  - f) a battery in a circuit with said heating element and said vibrators; and
  - 15 g) a controller adapted to control current to said heating element and said vibrators.
2. The device of claim 1, wherein said back support plate includes openings and said vibrators are positioned within said openings.
3. The device of claim 1, wherein said belt has first and second attachable end sections of given widths and a center section having a width greater than the widths of said ends, said pad, heating element and back support plate being positioned in said center section.

4. The device of claim 1, wherein said vibrators are independently activatable in a predetermined sequence by said controller.

5. The device of claim 1, further including a pressure activated switch on said belt in circuit with said battery, said pressure activated switch being deactivated 5 when said belt is not worn by a user.

6. The device of claim 1, wherein said heat retention material is crushed lava rock.

7. The device of claim 1, wherein said heat transfer pad inner and outer coverings are joined to each other to form discrete sections, each section being filled 10 with a heat retention material.

8. The device of claim 1, wherein said belt has a longitudinal axis, and said pad coverings are joined at parallel lines to form tubular sections, each of said tubular sections being filled with said heat retention material, said parallel lines being parallel to the longitudinal axis of said belt.

15 9. The device of claim 1, wherein said heat retention material has an average particle size of up to 10 mm.

10. A back support device for heating and vibrating a user's back comprising:

20 a) a belt having an inner covering and an outer covering;  
b) a conformable heat transfer pad, said pad having inner and outer coverings joined to each other to form discrete sections, each discrete section being

filled with a particulate heat retention material, said pad having an inner side adjacent said belt inner covering, an outer side;

c) a heating element having an inner side adjacent the outer side of said heat retention pad, an outer side;

5 d) a back support plate adjacent the outer side of said heating element;

e) transcutaneous nerve stimulator electrodes;

f) a battery in a circuit with said heating element, said stimulator electrodes; and

10 g) a controller adapted to control current flow to said heating element and said stimulator electrodes.

11. The device of claim 10, wherein said transcutaneous nerve stimulation electrodes include a pair of electrode pads joined to said controller by electrical cables, and said controller includes means for controlling the frequency and intensity of electrical impulses sent to said electrode pads.

15 12. A back support device for heating and vibrating a user's back

comprising:

a) a belt having an inner covering and an outer covering;

b) a conformable heat transfer pad, said pad having inner and outer coverings joined to each other to form discrete sections, each discrete section being

20 filled with a particulate heat retention material, said pad having an inner side adjacent said belt inner covering, an outer side;

c) a heating element having an inner side adjacent the outer side of said heat retention pad, an outer side;

d) a back support plate adjacent the outer side of said heating element;

e) a transcutaneous nerve stimulator;

5 f) a plurality of vibrators;

g) a battery in a circuit with said heating element, said transcutaneous nerve stimulator, and said vibrators; and

h) a controller adapted to control current flow to said heating element, said transcutaneous nerve stimulation electrodes, and said vibrators.

10 13. The device of claim 12, wherein said heat transfer pad has an outer periphery and said heating element has an outer periphery smaller than said pad periphery.

14. The device of claim 12, wherein said vibrators are positioned beyond said heating element periphery, but within said pad periphery;

15 15. The device of claim 12, wherein said transcutaneous nerve stimulation electrodes include a pair of electrode pads joined to said controller by electrical cables, and said controller includes means for controlling the frequency and intensity of electrical impulses sent to said electrode pads.

16. The device of claim 12, wherein said belt has first and second attachable  
20 end sections of given widths and a center section having a width greater than the widths of said ends, said pad, heating element and back support plate being positioned in said center section.

17. The device of claim 12, wherein said vibrators are independently activatable in a predetermined sequence by said controller.

18. The device of claim 12, further including a pressure activated switch on said belt in circuit with said battery, said pressure activated switch being deactivated 5 when said belt is not worn by a user.

19. The device of claim 12, wherein said belt has a longitudinal axis, and said pad coverings are joined at parallel lines to form tubular sections, each of said tubular sections being filled with said heat retention material, said parallel lines being parallel to the longitudinal axis of said belt.

10 20. The device of claim 12, wherein said heat retention material has an average particle size of up to 10 mm.